

4 a display for the display of map information and
5 selectable waypoints, the selectable waypoints being displayed with
6 respect to the map information;

7 a receiver for receiving GPS signals;

8 means for processing the GPS signals whereby
9 location of the personal digital communicator may be determined;

10 a first transceiver;

11 a first modem coupled to the transceiver and to a
12 first digital processor;

Amended.
13 communicator input means for formatting a request
14 for map information, and for selecting a waypoint, the communicator
15 input means coupled to the first digital processor;

16 the first digital processor [providing a means for
17 processing the GPS signals and determining therefrom the location
18 of the communicator, for transmitting] being programmed to cause
19 display of map information and selectable waypoints by the display,
20 and to cause transmission via the first modem and the first
21 transceiver [the] of requests for map information and requests for
22 additional data associated with a selected waypoint [and for
23 displaying on the display the communicator location with reference
24 to the map information]; and

25 a map storage and transmitting device comprising a second
26 transceiver, a second modem coupled to the second transceiver and
27 a second digital processor, memory accessible by the second digital
28 processor for storing map information [in digital form], waypoints,
29 and additional data associated with the waypoints, [the second
30 digital processor providing a] the second digital processor being
31 programmed to [means for] determine[ing] which map information
32 stored in the memory is responsive to the request for map
33 information and to cause [transmitting] transmission via the second
34 modem and the second transceiver [the] of map information
35 responsive to the request.

✓ Please cancel claims 4 and 5.

Please amend claims 6 as follows:

25
8. (Amended) The locating and map downloading system of
claim [5] 1 wherein the personal digital communicator further
comprises communicator memory, operatively coupled to the first
digital processor, for storing map information and additional[ly
stored] data [in digital form and the first processor stores in
communicator memory the device location].

✓ Please cancel claim 8.

Please amend claims 9 and 10 as follows:

13
8. (Amended) The locating and map downloading system of
claim [4] 1 wherein the communicator input means for formatting
[first processor] requests for map information [and additionally
stored data] uses[ing] selection criteria.

4
10. (Amended) The locating and map downloading system of
claim 1 [4] wherein the first digital processor is further
programmed to cause transmission via the first modem and the first
transceiver [first processor transmits] further data associated
with a location to the map storage and transmittal device and the
second processor stores the further data associated with the
location in the map storage and transmittal device memory.

✓ Please cancel claim 11.

Application No. 08/879,955

Please amend claim 12 as follows:

A4
1 ⁵
2 ~~12~~. (Amended) The locating and map downloading system of
3 claim 1 wherein the first digital processor determines a heading of
direction of the personal digital communicator.

✓ Please cancel claims 13 and 14.

Please amend claim 15 as follows:

A5
1 ¹⁸
2 ~~15~~. (Amended) The locating and map downloading system of
3 claim 1 [14] wherein the first digital processor is programmed to
4 cause display[s] of different waypoints on the display[ed map
5 information different markers] based on aspects of the
additional[ly stored] data.

✓ Please cancel claim 16.

Please amend claims 17, 18, 19 and 20 as follows:

1 ¹⁵
2 ~~17~~. (Amended) The locating and map downloading system of
3 claim 1 [5] wherein the first digital processor is programmed to
determine[s] a route to a selected waypoint [marker].

A6 cont.
1 ¹⁶
2 ~~18~~. ¹⁵ (Amended) The locating and map downloading system of
3 claim ~~17~~ wherein the first digital processor is programmed to
4 determine[s] a route to a number of sequentially selected waypoints
[markers].

1 ¹⁷
2 ~~19~~. ¹⁶ (Amended) The locating and map downloading system of
3 claim ~~18~~ wherein the first digital processor is programmed to
modify [modifies] the route to a number of sequentially selected

4 [markers] waypoints in response to the selection of a further
5 waypoint [marker].

Ab 1 ¹⁹~~20~~. (Amended) The locating and map downloading system of
2 claim [16] ¹⁸~~18~~ wherein the first digital processor is programmed to
3 cause the display to [displays on the] display the additional[ly
4 stored] data associated with a selected waypoint [discrete data
5 point] when [the marker associated with] the waypoint [discrete
6 data point] is selected.

✓ Please cancel claim 21.

Please amend claims 22-27 as follows:

1 ²⁰~~22~~. (Amended) The locating and map downloading system of
2 claim [21] ¹⁹~~20~~ wherein the additional[ly stored] data comprises a
3 video data file.

1 ²¹~~23~~. (Amended) The locating and map downloading system of
2 claim [21] ¹⁹~~20~~ wherein the additional[ly stored] data comprises an
3 audio data file.

24. (Amended) The locating and map downloading system of
claim ²²~~23~~ further comprising a weather information gathering device
for providing weather information to the first digital processor.

1 25. (Amended) The locating and map downloading system of
2 claim 24 wherein the first digital processor is programmed to
3 automatically transmit[s] via the first modem and first transceiver
4 the weather information.

6
26. (Amended) The locating and map downloading system of
claim 1 wherein the first digital processor is programmed to
determine[s] the direction of North.

14
13
1 (Amended) The locating and map downloading system of
claim 9 wherein the first digital processor is programmed to
determine[s] if the communicator memory contains map information
for a geographic area within a selected radius of the personal
digital communicator and to cause transmission [transmit] via the
first modem and the first transceiver a request for map information
for a geographic area within a selected radius of the personal
digital communicator if the communicator memory does not contain
such map information.

Please amend 32, 33, and 34 as follows:

11
32. (Amended) The locating and map downloading system of
claim 1 wherein the first digital processor stores communicator
configuration information in the communicator memory and is
programmed to configure the personal digital communicator according
to the configuration information.

12
11
33. (Amended) The locating and map downloading system of
claim 32 wherein the communicator configuration information
includes at least one personal identification number and the first
digital processor is programmed to configure[s] the personal
digital communicator differently in response to different personal
identification numbers.

26
34. (Amended) A personal digital communicator device
comprising:
a GPS receiver for receiving GPS signals;

4 a processor to determine the device location based on the GPS
5 signals, the processor being programmed to format requests for
6 specified data regarding unspecified locations within a geographic
7 area from a data provider and to process responsive data to the
8 requests received by a communications means, the responsive data
9 including geographic location data;

10 the communication means [to provide] providing a means [the
11 device location to other personal digital communicator devices, to
12 receive device locations of the other personal digital
13 communicators, and to] for requesting [request] and [receive]
14 receiving map information from digital map storage devices; and

15 a display [to display] for displaying external map information
16 received from digital map storage devices[,] and the device
17 location [and the other device locations with respect to the
18 external map information].

✓ Please cancel claim 35.

Please amend claim 36 as follows:

A9 1 ³⁵~~36~~. (Amended) The personal digital communicator device of
2 claim ³⁶~~34~~ wherein the display displays a symbol indicative of the
3 geographic location of the responsive data with respect to [on] the
4 external map information[display].

Please amend claim 39 as follows:

A10 1 ³⁵~~39~~. (Amended) The personal digital communicator device of
2 claim ³⁴~~38~~ wherein the display displays [the internal map information
3 in the computer memory and] a symbol indicative of the geographical
4 location of the responsive data with respect to [on] the internal
5 map information[display].

Please amend claim 42 as follows:

38
42. (Amended) The personal digital communicator device of
claim 40 wherein the indicative symbol is selectable using the
keyboard input means and the processor formats a request for data
regarding the geographical location indicated by the indicative
symbol when the indicative symbol is [requested] selected.

Please add the following new claims:

41
51. A locating and map downloading system comprising:
a personal digital communicator comprising:
means for determining a location of the
personal digital communicator;
means for requesting map information and
additional data associated with specific locations within the map
information from a map storage and transmission device;
means for receiving the map information and
additional data associated with specific locations within the map
information from the map storage and transmission device;
means for storing the map information and
additional data associated with specific locations within the map
information;
means for displaying the map information and
markers indicating availability of additional data associated with
specific locations within the map information and the location of
the personal digital communicator with respect to the map
information;
means for selecting a one of the markers;
means for determining if additional information
associated with a specific location identified by a marker is

22 stored by the means for storing the map information and the
23 additional data; and

24 means for requesting further additional data
25 associated with the specific location identified by the marker from
26 the map storage and transmission device; and

27 the map storage and transmission device
28 comprising:

29 means for receiving the request for map
30 information and additional data associated with specific locations
31 within the map information and for receiving the request for
32 further additional data; and

33 means for processing the request for map
34 information and additional data associated with specific locations
35 within the map information and for processing the request for
36 further additional data; and

37 means for transmitting the map information and
38 additional data associated with specific locations within the map
39 information and for transmitting the further additional data. --

1 -- ⁴⁵~~52~~. A personal digital communicator comprising:

2 a processor;

3 a memory accessible by the processor;

4 a display coupled to the processor, the display
5 displaying map information and a position of the personal digital
6 communicator with respect to the map information, the map
7 information including waypoints, as commanded by the processor;

8 input means for formatting requests for map information
9 and for selecting waypoints;

10 a GPS receiver coupled to the processor, the processor
11 being programmed to process information received by the GPS
12 receiver to determine therefrom the position of the personal
13 digital communicator;

14 a transceiver coupled to the processor;
15 the processor being programmed to request map information
16 using the transceiver from a map storage and transmitting device,
17 to process map information received from the map storage and
18 transmitting device, to determine the availability of additional
19 stored data for waypoints in the memory upon selection of a one of
20 the waypoints by the input means, and to request additional stored
21 data using the transceiver from the map storage and transmitting
22 device upon selection of the one of the waypoints if the additional
23 stored data is not available in the memory. --

A 1/2
concl.
1 -- ~~33~~³¹. The personal digital communicator device of claim ~~34~~³⁶
2 wherein the communication means provides a means for providing the
3 personal digital communicator device location to other personal
4 digital communicator devices and a means for receiving locations of
5 the other personal digital communicators. --

1 -- ~~34~~³¹. The personal digital communication device of claim ~~35~~³⁶
2 wherein the display displays the other device locations with
3 respect to the external map information. --

REMARKS

The application as filed included claims 1-50. Restriction was required under 35 U.S.C. § 121 to claims 1-47 or 48-50. Applicants previously elected claims 1-47.

Claims 1-11, 27-31 and 34-40 are rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 5,760,742 issued to Branch et al. ("Branch"). Claims 12-26 and 41-45 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Branch in view of U.S. Patent No. 5,528,248 issued to Steiner et al. ("Steiner"). Claims 32, 33 and 45-47 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Branch and Steiner and further in view of

U.S. Patent No. 5,335,276 issued to Thompson et al. ("Thompson"). Claims 21 and 27 are further rejected under 35 U.S.C. § 112, second paragraph, as indefinite.

Applicant now cancels claims 4, 5, 8, 11, 13, 14, 16, 21, 35 and 48-50, amends claims 1, 6, 9, 10, 12, 15, 17-20, 22-27, 32, 34, 36, 39, and 42, and adds new claims 51-54. Accordingly, claims 1-3, 6, 7, 9, 10, 12, 15, 17-20, 22-34, 36-47, and 51-54 are currently pending in the application.

Branch discloses "an integrated geographic information and automatic position locating system." (Branch, Abstract). "The geographic mapping system includes memory for storing previously recorded geographic information, and input for entering new geographic information, and a display for displaying visual images of the previously recorded geographic information and the newly entered geographic information." (Branch, col. 2, lines 42-47). In addition, the geographic mapping system of Branch "provides a two-way communication link between the integrated geographic information and automatic vehicle location system and at least one desired location such as a base station." (Branch, col. 2, lines 53-56). Further, Branch discloses an input to input various in vehicle navigation related information, including a request for the base station to transmit navigation information on a desired area. (See Branch, col. 7, lines 60-67 and col. 10, lines 61-65).

Claim 1 as amended requires the "selectable waypoints being displayed with respect to the map information," with "communicator input means for formatting a request for map information and for selecting a waypoint, the communicator input means coupled to the first digital processor; the first digital processor being programmed to cause display of map information and selectable waypoints by the display, and to cause transmission via the first modem and the first transceiver requests for map information and

requests for additional data associated with a selected waypoint. . . "

Branch does not disclose selectable waypoints indicating the availability of additional data, means for determining if such additional data is available on the device upon selection of the selectable waypoint, or means for requesting such additional data from a map storage and transmitting device if such additional data is not present on the device. Indeed, Branch does not disclose the use of waypoints at all. Accordingly, claim 1 as amended is allowable over Branch.

Steiner does disclose the use of waypoints. (See, e.g., Steiner, FIG. 3). Steiner, however, discloses selection of a waypoint key which "causes the visual display 36 to display a waypoint mode including the range 152, the bearing, estimated time and route, estimated time of arrival to next waypoint 168." (Steiner, col. 10, lines 60-63). Steiner does not disclose selectable waypoints indicating the availability of additional data, means for determining if such additional data is available on the device upon selection of the selectable waypoint, or means for requesting such additional data from a map storage and transmitting device if such additional data is not present on the device. Accordingly, claim 1 as amended is allowable over Steiner, as well as Branch in view of Steiner.

Further, Thompson does not disclose selectable waypoints indicating the availability of additional data, means for determining if such additional data is available on the device upon selection of the selectable waypoint, or means for requesting such additional data from a map storage and transmitting device if such additional data is not present on the device. Instead, Thompson teaches that "only information which is critical in nature or has changed must be transmitted via the selected communication network." (Thompson, col. 19, lines 27-30). Applicants

respectfully submit that Thompson, even if combined with either or both Branch and Steiner, does not lead to the invention as claimed in amended claim 1.

Claim 1 as amended is therefore allowable. As claims 2, 3, 6, 7, 9, 10, 12, 15, 17-20, and 22-33 depend from claim 1, these claims are also allowable. Claims 6, 9, 10, 12, 15, 17-20, 22-27, and 32 have also been amended to clarify the claims in view of consistency in naming of elements of the claims. In this regard, Applicants note that with regard to the Examiner's specific \$112 objection, claim 21 has been canceled and claim 27 amended in accordance with the Examiner's suggestion.

Claim 34 has been amended to include the limitations of claim 35. As amended, claim 34 requires "a processor ..., the processor being programmed to format requests for specified data regarding unspecified locations within a geographic area from a data provider and to process responsive data ...". Applicants respectfully submit that such is not disclosed by Branch. The portions of Branch referring to the sending of messages so that "[t]he vehicle user might inform the base station, for example, that a deviation from the scheduled route is required..." or that "the user can also receive new geographic information..." simply do not disclose, or even teach or suggest, claim 34 as amended.

Accordingly, claim 34 is now allowable. Claims 36, 39, and 42, amended to increase clarity, claims 37, 38-41, and 43-47, and new claims 53 and 54 depend on claim 34 and are also therefore allowable.

New claim 51 requires "means for displaying the map information and markers indicating availability of additional data associated with specific locations within the map information; means for selecting a one of the markers; means for determining if additional information associated with a specific location identified by a marker is stored by the means for storing the map

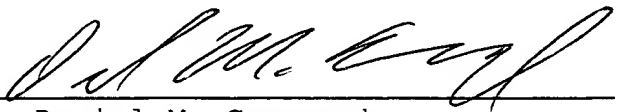
information and the additional data; and means for requesting further additional data associated with the specific location identified by the marker from the map storage and transmission device. . . ." New claim 52 requires a processor "programmed to request map information using the transceiver from a map storage and transmitting device, to process map information received from the map storage and transmitting device, to determine the availability of additional stored data for waypoints in the memory upon selection of a one of the waypoints by the input means, and to request additional stored data using the transceiver from the map storage and transmitting device upon selection of the one of the waypoints if the additional stored data is not available in the memory. . . ." Accordingly, and in view of the preceding, claims 51 and 52 are also allowable.

As the amendment places the claims in condition for allowance, allowance of same is respectfully requested.

As correction of the title and the drawings is not required for further consideration of the claims, Applicants respectfully request that this requirement be held in abeyance pending allowance of the claims.

Respectfully submitted,

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